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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/616,638	07/26/2000	Percy Bennwik	10806-109	8709

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EXAMINER

BOGART, MICHAEL G

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 06/04/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/616,638

Applicant(s)

BENNIK ET AL.

Examiner

Michael G. Bogart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40, 42, 44-51, 53-89 and 92-97 is/are pending in the application.
- 4a) Of the above claim(s) 44-51 and 53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-40, 42, 54-75, 77-80 and 92-97 is/are rejected.
- 7) ☒ Claim(s) 13, 76 and 81-89 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 & 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restriction

Applicant's election with traverse of claims 1-40, 42, 54-89 and 92-97 in Paper No. 10 is acknowledged. The traversal is on the ground(s) that it would not be unduly burdensome for the Examiner to examine claims 44-51 and 53. This is not found persuasive because these inventions are distinct to the extent that the search required for the method of manufacture is not required for the search for the pressurisable container, restriction for examination purposes as indicated is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

Claim 10 is objected to because of the following informalities: Claim 10 recites the limitation "the opening duct" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

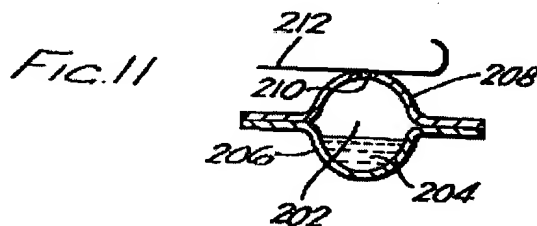
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-4, 6-12, 14-17, 19-21, 24, 27, 28, 30-37, 40, 54-57, 59, 60, 62, 63 and 92 are rejected under 35 U.S.C. § 102(b) as being anticipated by Scherer (WO 96/06581).

Regarding claim 1, Scherer teaches a pressurisable container for storing and ejecting liquid (204), the container comprising a front wall (208) having or surrounding a cavity (202) corresponding to the form of an open vessel, an opening (210) in the front wall (208) adapted of ejection of the liquid (204) from the container, said opening (210) defining a container axis, optionally a sealing (212) over the opening (210) adapted for temporary use, and a rear wall (206) closing and sealing the open part of the front wall (208) vessel to confine a space for the liquid (204) in the container, the rear wall (206) running at least partially perpendicular to the container axis and being displaceable or deformable for movement towards the opening to pressurize the container liquid (204), wherein the front wall (208) is substantially rigid in relation to the rear wall (206), the rear wall (206) before pressurizing the container is substantially flat or substantially single curved, and the rear wall (206) is deformable under stretching to substantially fill out the container cavity (202)(see Fig. 11, below).



Regarding claim 2, see Fig. 11, above.

Regarding claim 3, Scherer teaches a cavity (202) that has little or no undercut parts when seen from the rear.

Regarding claim 4, Scherer teaches a front wall (208) that has a roughly constant thickness.

Regarding claims 6 and 7, Scherer teaches that the front or rear surface of the front wall (208) is substantially flat or single-curved.

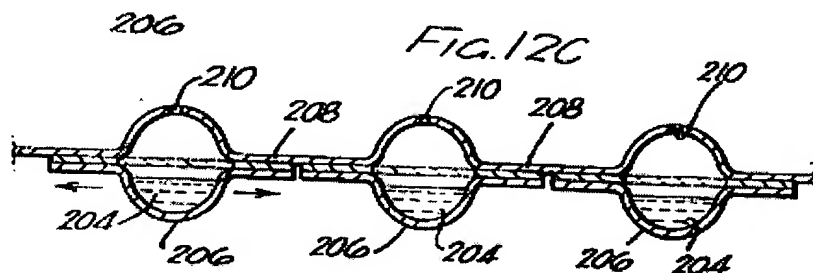
Regarding claim 8, Scherer teaches that the front and rear surfaces of the front wall (208) are substantially parallel or concentric.

Regarding claim 9, Scherer teaches a front wall (208) has an overall shape of a plate or a cylinder part (e.g., a hemispherical end).

Regarding claim 10, Scherer teaches an opening duct (210) that has a cross-section that is roughly constant.

Regarding claims 11 and 12, Scherer teaches an opening (210) that may assist in atomizing a liquid or in forming a coherent liquid stream (page 9, lines 24-29).

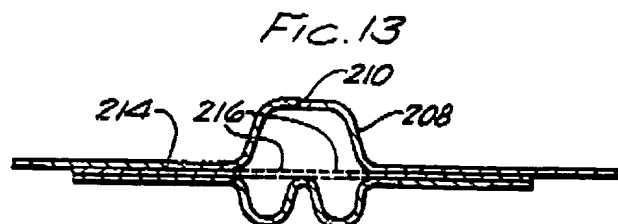
Regarding claims 14-17, see Fig. 12C, below.



Regarding claim 19, Scherer teaches a unit that is substantially rigid and self-bearing.

Regarding claim 20, 21, 24 and 28, see Fig. 12C, above.

Regarding claim 27, see Fig. 13, below.



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Regarding claim 30-32, Scherer teaches a rear wall (206) that is a foil laminate (page 15, lines 10-21). It is noted that metal foils are inherently inelastic in the conditions of use taught by the reference.

Regarding claims 33-35, Scherer teaches a temporary sealing (212).

Regarding claim 36, see page 6, lines 23-31.

Regarding claim 37 and 95, see page 3, line 23-page 4, line 4.

Regarding claim 40, Scherer teaches a rear wall (206) attached to the rear surface of a front wall (208)(see Fig. 12 C, above).

Regarding claims 54-57, Scherer teaches a method for ejecting liquid from a container, the container comprising a front wall (208) having or surrounding a cavity (202) corresponding to the form of an open vessel, an opening (210) in the front wall (208) adapted for ejection of the liquid (204) from the container, said opening (210) defining a container axis, optionally a sealing (212) over the opening (210) adapted for temporary use, and a rear wall (206) closing and sealing the open part of the front wall (208) vessel to confine a space for the liquid (204) in the container, the rear wall (206) running at least partially perpendicular to the container axis and being displaceable or deformable for movement towards the opening to pressurize the container liquid (204), pressurizing the container by moving the rear wall (206) at least partially in the axial direction and towards the opening (210) with sufficient speed to eject liquid (204) through the opening (210) and hereunder stretching the rear wall (206) to increase its surface (page 7, lines 1-10).

Regarding claim 59, see page 4, lines 2-4.

Regarding claim 60, see page 9, lines 24-29.

Regarding claims 62 and 63, see page 1, lines 1-4.

Regarding claim 92, Scherer teaches device comprising a ram (see Fig. 13).

Claims 1, 5, 14, 18, 19, 20-26 and 42, are rejected under 35 U.S.C. § 102(b) as being anticipated by Lloyd *et al.* (US 5,709,202 A).

Lloyd *et al.* teach a pressurisable container (16) for storing and ejecting liquid, the container (16) comprising a front wall having or surrounding a cavity corresponding to the form of an open vessel, an opening (13) in the front wall (208) adapted of ejection of the liquid from the container, said opening (13) defining a container axis, optionally a sealing (12) over the opening (13) adapted for temporary use, and a rear wall (14) closing and sealing the open part of the front wall vessel to confine a space for the liquid in the container (16), the rear wall (14) running at least partially perpendicular to the container axis and being displaceable or deformable for movement towards the opening (13) to pressurize the container liquid, wherein the front wall is substantially rigid in relation to the rear wall (14), the rear wall (14) before pressurizing the container is substantially flat or substantially single curved, and the rear wall (14) is deformable under stretching to substantially fill out the container cavity, wherein the front wall has a thickness that increases away from the axis (see Fig. 3, below).

Regarding claims 14, 18, 20 and 42, see Fig. 4, below.

Regarding claim 19, Lloyd *et al.* teach a unit which is rigid and self-bearing.

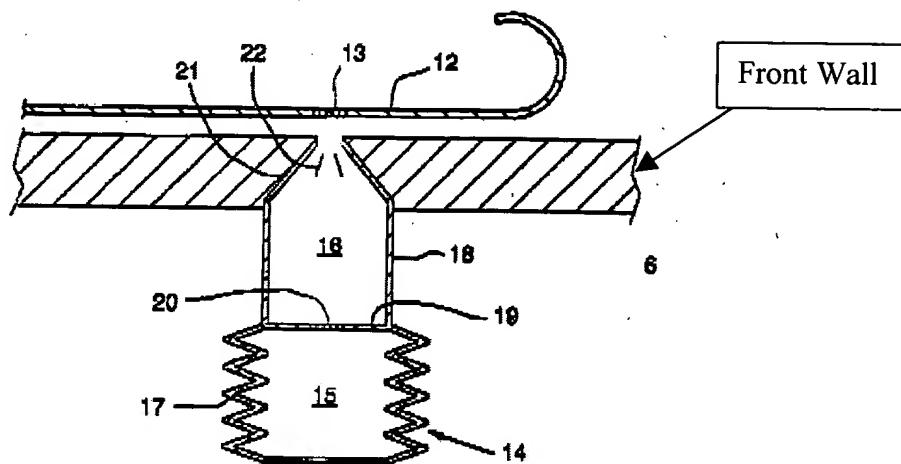
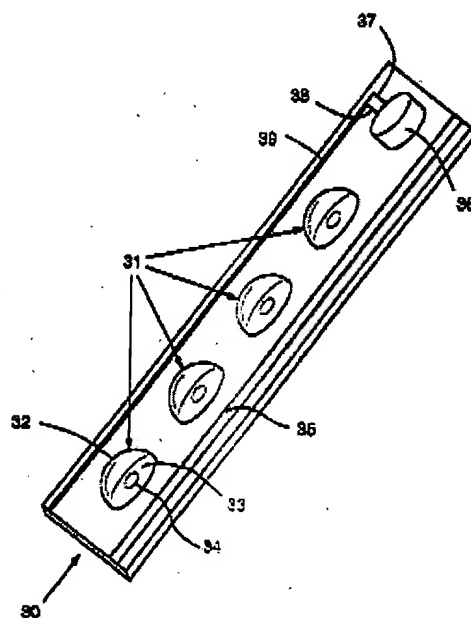
Regarding claim 21, see Fig. 3, below.

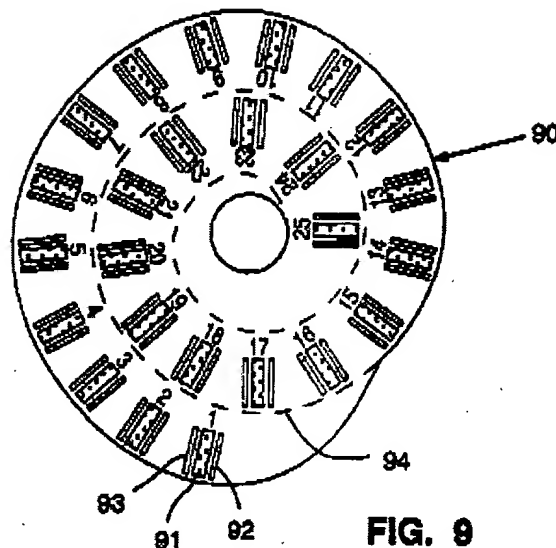
Regarding claims 22 and 23, see Fig. 9, below.

Regarding claims 24 and 25, Lloyd *et al.* teach a front wall (90) comprising a partial cylinder (e.g., the end portion of a cylinder)(see Fig. 9, below).

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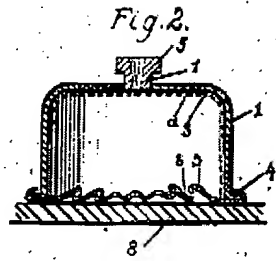
Regarding claim 26, Lloyd et al. teach several containers (91) positioned over two dimensions of the cylinder surface (see Fig. 9, below).

**FIG. 3****FIG. 4**



Claims 1 and 29 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bergerioux (US 2,208,744).

Regarding claim 1, Bergerioux teaches a pressurisable container for storing and ejecting liquid, the container comprising a front wall (1) having or surrounding a cavity corresponding to the form of an open vessel, an opening (2) in the front wall (1) adapted of ejection of the liquid from the container, said opening (2) defining a container axis, optionally a sealing (10) over the opening (2) adapted for temporary use, and a rear wall (3) closing and sealing the open part of the front wall (1) vessel to confine a space for the liquid in the container, the rear wall (1) running at least partially perpendicular to the container axis and being displaceable or deformable for movement towards the opening to pressurize the container liquid, wherein the front wall (1) is substantially rigid in relation to the rear wall (3), the rear wall (3) before pressurizing the container is substantially flat or substantially single curved, and the rear wall (3) is deformable under stretching to substantially fill out the container cavity (see Fig. 2, below).



Regarding claim 29, Bergerioux teaches an elastic rear wall (6)(page 2, lines 10-18).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Claim 38, 39, 58, 61, 93, 94, 96 and 97 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Scherer.

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Scherer expressly discloses the claimed invention except for the specific structural dimensions (such as wall thickness) and test characteristics (including the minimum velocity the fluid is ejected from the container).

Generally, differences in size, or differences in test characteristics will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such test characteristic is critical. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). Regarding claims 38, 39, 58, 61, 93, 94, 96 and 97, the benefits of optimizing the thickness of the front wall, the diameter of the cavity, ejected liquid speed and distance, or the liquid space volume, would have been known prior to applying a test, making these values result-effective variables. One of ordinary skill in the art would have recognized the benefit of changing the device’s dimensions to fit the amount of fluid required by the target organ, changing wall thickness to meet strength requirements, modifying the velocity and range of fluid ejection to meet the requirements of the target organ so as to provide for optimized performance.

Claims 64-75 and 77-80 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lloyd *et al.*

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Lloyd *et al.* expressly teach the claimed invention except for the specific distance between the front and rear walls.

Merely changing the size of a prior art device is not sufficient to patentably distinguish the claimed invention over the prior art. *Gardener v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). MPEP 2144.04 IV.

Regarding claims 64-68, Lloyd teaches an actuator (77), a ram (44) and a seat (41), into which containers may be fed and removed to be replaced by a subsequent container.

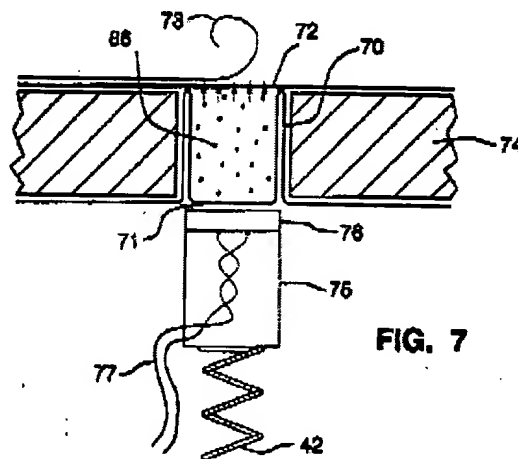
Regarding claim 69, see Fig. 9, above.

Regarding claim 70, Lloyd *et al.* teach a guiding mechanism (42).

Regarding claims 71-73, Lloyd *et al.* teach a releasable lock (53).

Regarding claim 74, Lloyd *et al.* teach a ram head (76) and piston (75).

Regarding claim 75, see Fig. 7, below.



Regarding claims 77 and 78, see Fig. 7.

Regarding claims 79 and 80, Lloyd teaches a mechanical actuator (42).

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Allowable Subject Matter

Claims 13, 76 and 81-89 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (703) 605-1184. The examiner can normally be reached Monday-Friday.

In the event the examiner is not available, the examiner's supervisor, Weilun Lo may be reached at phone number (703) 308-1957. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 306-4520 for informal communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0858.



Michael Bogart
May 30, 2003



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TECHNOLOGY CENTER 3700